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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/164,624	10/01/1998	YOSHIHIRO ISHIDA	35.C-13000	6892

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EXAMINER	
YE, LIN	

ART UNIT	PAPER NUMBER
2622	

DATE MAILED: 08/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/164,624	ISHIDA ET AL.	
	Examiner	Art Unit	
	Lin Ye	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 January 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *24-41* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *21-41* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114 filed on 1/23/2006, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/21/2005 has been entered.

2. Applicant's arguments with respect to claim 24-41 filed on 12/21/2005 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 24-25, 31-32, 37-38 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paff U.S. Patent 5,164,827 in view of Fujioka et al. U.S. Patent 4,908,704 (this reference has been submitted in the PTO-892 mailed on 4/29/05).

Referring to claim 24, the Paff reference discloses in Figures 1-6, an image processing apparatus (any one of the slave cameras SD1-SD5 is considered as the image processing apparatus) comprising: an input unit adapted to input image data (e.g., image and lens assembly 17, each of slave cameras SD1-SD5 has the same component configuration as the master camera MD, see Col. 3, lines 29-30 and Col. 3, lines 58-62); a reception unit adapted to receive information of a distance to the object, for detecting a desired object, form an external apparatus (the master camera MD **and** monitoring station 11 are considered as the "external apparatus"; the master camera **broadcasts** the coordinate position of the object S **and a desired range value** as the "information of a distance to the object" to any one of slave cameras SD1-SD5, see Col. 6, lines 56-60), via a communication interface (bidirectional communications paths 21, see Col. 3, lines 25-27); a detection unit adapted to detect that the desired object (e.g., the slave camera SD2 first determines the distance between its projected position in plane 2 of the desired object for detecting the distance D_{SD2} between the slave camera SD2 and the object S, see Col. 6, lines 62-65 and Col. 7, lines 1-9) exists in a predetermined range, on the basis of the information received said reception unit from the image data input by said input unit and a transmission unit adapted as shown in Figure 5, to transmit information corresponding to a detection result of said detection unit to the external apparatus via the communication interface, in a case in which said detection unit detects that the desired object exists in the predetermined range (e.g., if the distance from a

slave camera 2 to the desired object S is determined to be within **the desired range,** i.e., a radius of 30 feet as "the predetermined range", the slave camera SD2 will adjust its pan, tilt and zoom status, see Col. 7, lines 10-16; and the slave camera SD2 will reflecting detection of the desired object to the monitor station 11 for displaying the image of desired object on the monitors via the communication interface 21; otherwise if out of the predetermined range, the slave camera SD2 will not reflecting detection of the desired object to monitor station 11, see Col. 7, lines 54-66). However, the Paff reference does not explicitly shows the detection unit adapted to detect **whether the desired object exists in the image data input unit** within a predetermined range.

The Fujioka reference shows in Figures 1-3, an image processing apparatus comprising an input unit (image input device 2) adapted to input image data; a detection unit (e.g., image processor 100 including distance detecting section 16 and object size detecting section 18, see Col. 3, lines 5-14) adapted to detect whether the desired object exists in the image data input by said input unit within a predetermined range (See Col. 5, lines 10-18). The Fujioka reference is evidence that one of ordinary skill in the art at the time of the invention to see more advantages for the image processing apparatus detect whether the desired object exists in the image data input by said input unit within a predetermined range so that an appropriate alarm can be generated under a very effective monitor condition (See Col. 5, lines 41-50). For that reason, it would have been obvious to modify the system of Paff by providing the detection unit adapted to detect **whether the desired object exists in the image data input unit** within a predetermined range as taught by Fujioka.

Referring to claim 25, the Paff and Fujioka references disclose all subject matter as discussed with respected to claim 24, and the Paff reference discloses wherein said input unit of video slave camera SD comprises an image pickup unit (17, each of slave cameras SD1-SD5 has the same component configuration as the master camera MD, see Col. 3, lines 29-30 and Col. 3, lines 58-62) adapted to pick up the object image through an optical system.

Referring to claim 31, the Paff and Fujioka references disclose all subject matter as discussed with respected to same comment as with claim 24.

Referring to claim 32, the Paff and Fujioka references disclose all subject matter as discussed with respected to same comment as with claim 25.

Referring to claim 37, the Paff and Fujioka references disclose in Figures 1-6, an terminal apparatus (any one of the slave cameras SD1-SD5 is considered as the terminal apparatus) comprising: an input unit (image and lens assembly 17, each of slave cameras SD1-SD5 has the same component configuration as the master camera MD, see Col. 3, lines 29-30 and Col. 3, lines 58-62) adapted to input image data; a reception unit adapted to receive information of a distance to the object, for detecting a desired object, form an external apparatus (the master camera MD and monitoring station 11 are considered as the "external apparatus"; the master camera **broadcasts** the coordinate position of the object S and a desired range value as the "information of a distance to the object" to any one of slave cameras SD1-SD5, see Col. 6, lines 56-60), via a communication interface (bidirectional communications paths 21, see Col. 3, lines 25-27); a detection unit adapted to detect that the desired object (e.g., the slave camera SD2 first determines the distance between its projected position in plane 2 and the **received coordinate position** in the plane 2 of the desired object for detecting the

distance D_{SD2} between the slave camera SD2 and the object S, see Col. 6, lines 62-65 and Col. 7, lines 1-9) exists in a predetermined range, on the basis of the information received by said reception unit from the image data input by said input unit and a transmission unit adapted as shown in Figure 5, to transmit information corresponding to a detection result of said detection unit to another external apparatus via the communication interface, in a case in which said detection unit detects that the desired object exists in the predetermined range (and if distance from a slave camera 2 to the desired object S is determined to be within **the desired range,** i.e., a radius of 30 feet as the "predetermined range", the slave camera SD2 adjust its pan, tilt and zoom status, see Col. 7, lines 10-16; and the slave camera SD2 transmits detection of the desired object to the monitor station 11 for displaying the image of desired object on the monitors via the communication interface 21; otherwise if out of **the predetermined range**, the slave camera SD2 transmits detection of the desired object to monitor station 11, see Col. 7, lines 54-66).

Referring to claim 38, the Paff and Fujioka references disclose all subject matter as discussed with respected to same comment as with claims 25 and 37.

Referring to claim 41, the Paff and Fujioka references disclose all subject matter as discussed with respected to same comment as with claim 37.

5. Claims 26, 27,30, 33-34 and 39-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paff U.S. Patent 5,164,827 in view of Fujioka et al. U.S. Patent 4,908,704 and Salvati U.S. Patent 6,359,644.

Referring to claim 26, he Paff and Fujioka references disclose all subject matter as discussed with respected to claim 25, but except the Paff reference does not states the

surveillance camera system can use focusing control information to measure the distance from the object to the predetermined position instead of the coordinates of the selected position in the reference plane 2.

The Salvati reference discloses in Figure 2, a video camera (10) comprises a lens system having selected optical characteristics and a CCD imager. The system includes a microprocessor/CPU that calculates the size of the target object by mathematically manipulating the optical characteristics, the focus data, the zoom data, and pixel data. The exact object distance is determined by feedback from the focus motor and calculating the deviation from zero. (See Col. 5, lines 25-30). This would be an advantage over the Paff's surveillance camera system in that it could achieve to change an object image into a distance image for the purpose of recognizing objects and get more accurate distance result as taught by Salvati. For that reason, it would have been obvious to one of ordinary skill in the art at the time to see the surveillance camera can associate the focusing control information for measuring the distance from the detected object to the predetermined position disclosed by Paff.

Referring to claim 27, the Paff, Fujioka and Salvati references disclose all subject matter as discussed with respected to claim 26, and the Salvati reference discloses wherein the image pickup unit comprises a zoom control unit adapted to control zooming of the optical system, and said detection unit detects the object according to zoom control information generated by the zoom control unit (e.g., The Salvati's system includes a microprocessor/CPU that calculates the size and distance of the target object by mathematically manipulating the focus data, the zoom data. The exact object distance is

determined by feedback from the focus motor and calculating the deviation from zero and the magnification factor M is determined by the position of the zoom servo-feedbacks 17, see Col. 5, lines 25-30).

Referring to claim 30, the Paff, Fujioka and Salvati references disclose all subject matter as discussed with respected to claim 26, and the Paff reference discloses wherein said image processing apparatus is used in a monitoring camera system (video surveillance system, See Col. 1, lines 5-10).

Referring to claim 33, the Paff, Fujioka and Salvati references disclose all subject matter as discussed with respected to same comment as with claims 26 and 31-32.

Referring to claim 34, the Paff, Fujioka and Salvati references disclose all subject matter as discussed with respected to same comment as with claims 27 and 31-32.

Referring to claim 39, the Paff, Fujioka and Salvati references disclose all subject matter as discussed with respected to same comment as with claims 26 and 37-38.

Referring to claim 40, the Paff, Fujioka and Salvati references disclose all subject matter as discussed with respected to same comment as with claims 27 and 37-38.

6. Claims 28-29, 35-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paff U.S. Patent 5,164,827 in view of Fujioka et al. U.S. Patent 4,908,704 and Karmann et al. U.S. Patent 5,034,986.

Referring to claim 28, the Paff, Fujioka references disclose all subject matter as discussed with respected to claim 24, but except the Paff reference does not explicitly states the detection unit of slave cameras detects the object according to a difference value between pictures instead that master broadcast the coordinate position of the object.

The Karmann reference teaches in Figures 1-2, a detecting and tracking moving object system calculating a sequence of binary object masks by binarization of a difference image sequence formed from the input image sequence and the background image sequence using a threshold and determining the positions and size of the binary object (See Col. 3, lines 13-18 and lines 23-25). The Karmann reference is evidenced that one of ordinary skill in the art at the time of the invention to see more advantages for the image processing apparatus can detect the moving object according to a difference value between pictures so that the apparatus can quickly track and determine the position of desired object without waiting for external input. For that reason, it would have been obvious to modify the system of Paff by providing the detection unit of slave cameras detects the object according to a difference value between pictures as taught by Karmann.

Referring to claim 29, the Paff, Fujioka and Karmann references disclose all subject matter as discussed with respected to claim 28, and the Karmann reference discloses wherein said detection unit binarizes the difference value by using a predetermined threshold and detects the object according to a binarization result (See Col. 3, lines 13-18 and Col. 4, lines 34-42).

Referring to claim 35, the Paff, Fujioka and Karmann references disclose all subject matter as discussed with respected to same comment as with claim 28.

Referring to claim 36, the Paff, Fujioka and Karmann references disclose all subject matter as discussed with respected to same comment as with claim 29.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lin Ye whose telephone number is (571) 272-7372. The examiner can normally be reached on Mon-Fri 8:00AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David L. Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Lin Ye
Primary Examiner
Art Unit 2622

August 16, 2006